

REMARKS

Summary of Amendments

Upon entry of the above amendment, the specification and claims 1, 2, 4-6, 8, 9, 10, 12-14 and 16 will have been amended. Accordingly, claims 1-16 will be pending, with claims 1, 5, 9 and 13 being in independent form.

Status of Certified Priority Document

As a preliminary matter, the Examiner has acknowledged Applicant's claim to foreign priority, and has indicated that Applicant has filed a certified copy, but neglected to indicate on the form PTOL-326 that "All" of the certified copies of the priority documents have been received.

Accordingly, Applicant respectfully requests that the Examiner indicate such acknowledgment on form PTO-326 by checking off the correct box in the next office action.

Summary of Official Action

In the Office action, the Examiner rejected claims 1, 5, 9 and 13 as indefinite. Additionally, the Examiner rejected claims 1-16 over the applied art of record. By the present amendment and remarks, Applicant submits that the rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of

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the present application.

The Indefiniteness Rejection, Is Moot

Claims 1, 5, 9 and 13 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

The Examiner has noted that these claims recite a feature which lacks clear antecedent basis. By this Amendment, Applicant has amended these claims to correct the noted minor informality. Thus, Applicant submits that the above-noted rejection is overcome and has been rendered moot.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the rejection of these claims under 35 U.S.C. § 112, second paragraph.

Traversal of Rejections Under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 1 and 2 under 35 U.S.C. § 103(a) as unpatentable over JP 3017741 in view of US patent 5,096,596 to HELLENBRAND.

Applicant also respectfully traverses the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as unpatentable over JP 3017741 in view of US patent 5,096,596 to HELLENBRAND, and further in view of JP 04-007082.

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Applicant additionally also respectfully traverses the rejection of claims 5, 6, 9, 10, 13 and 14 under 35 U.S.C. § 103(a) as unpatentable over JP 3017741 in view of US patent 5,096,596 to HELLENBRAND, and further in view of US patent 6,299,775 to ELSTON.

Applicant further additionally respectfully traverses the rejection of claims 7, 8, 11, 12, 15 and 16 under 35 U.S.C. § 103(a) as unpatentable over JP 3017741 in view of US patent 5,096,596 to HELLENBRAND and US patent 6,299,775 to ELSTON, and further in view of JP 04-007082.

The Examiner acknowledged that JP 3017741 lacks, among other things, supplying rainwater to a purifier to carry out pH adjustment, that the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide, and monitoring a water level of the storage tank, and preventing the rainwater from entering the purifier and the storage tank if the water level has reached a predetermined upper limit. However, the Examiner asserted that HELLENBRAND teaches to use pH adjustment, that JP 04-007082 teaches to use hydrogen peroxide to produce active oxygen for sterilization, and that ELSTON teaches using level sensors in a holding or storage tank for collected rainwater. The Examiner then concluded that it would have been obvious to one of ordinary skill in the art combine the teachings of these documents.

Applicant respectfully traverses each of these rejections. Notwithstanding the Office Action assertions as to what each of these documents disclose or suggest, Applicant submits

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that no proper combination of these documents discloses or suggests, inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization* and *supplying the rainwater from the purifier to a storage tank*, as recited in amended independent claim 1, inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization*, *supplying the rainwater from the purifier to a storage tank*, and monitoring a water level of the storage tank, and preventing the rainwater from entering the purifier and the storage tank if the water level has reached a predetermined upper limit, as recited in amended independent claim 5, inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization*, *supplying the rainwater from the purifier to a storage tank*, and *monitoring a water level of the storage tank*, and supplying tap water into the storage tank if the water level of the storage tank has reached a predetermined lower limit, as recited in amended independent claim 9, and inter alia, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*, supplying the rainwater to a purifier to carry out *pH adjustment and sterilization*, *supplying the rainwater from the purifier to a storage tank*, *monitoring a water level of the storage tank*, and

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preventing the rainwater from entering the purifier and the storage tank if the water level of the storage tank has reached a predetermined upper limit, as recited in amended independent claim 13.

The Examiner has acknowledged that JP 3017744 is entirely silent with regard to *supplying rainwater to a purifier to carry out pH adjustment*. However, it is clear that this document also fails to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*. Indeed, the Examiner has failed to identify any language in this document which would disclose or suggest this feature. Applicant does not, for example, disagree that JP 3017741 discloses a rainwater purification tank. However, it is clear from a fair reading of drawings that the gutter pipe 4 leads directly into the tank 1. Thus, the figures cannot properly be relied upon to disclose or suggest *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Applicant does not dispute that HELLENBRAND apparently discloses the use of oxygen (see col. 4, lines 53-56) and MnO_2 (see col. 3, lines 18-23) with water. However, the Examiner has failed to point to any specific disclosure with regard to using the MnO_2 as a catalyst to produce oxygen from e.g., hydrogen peroxide. Applicant also submits that this document is entirely silent with regard to *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building*.

Applicant further notes, by way of background, that HELLENBRAND relates to aeration system which uses a pressurized environment. The invention, on the other hand, relates to a system which operates under the force of gravity. See Fig.1 of the instant application. Moreover, as JP 3017741 similarly relates to a gravity system, it is not apparent that it would have been obvious to one of ordinary skill in the art to combine the gravity system of JP 3017741 with the pressurized system of HELLENBRAND. Indeed, the Examiner has failed to consider and address this reason for non-obviousness

Applicant acknowledges that JP 04-007082 appears to disclose using oxygen generated from hydrogen peroxide. However, it is clear from a fair reading of this document that the disclosed system is used only with regard to contaminated water so as to prevent the clogging of pipes. There is no apparent disclosure with regard to collecting rainwater. Nor has the Examiner identified any. Applicant further submits that this document is similarly also entirely silent with regard to, among other features recited in the above-noted claims, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, and/or supplying the rainwater to a purifier to carry out pH adjustment and sterilization, and supplying the rainwater from the purifier to a storage tank.*

Finally, Applicant submits that ELSTON contains no disclosure or suggestion with regard to sterilizing rainwater, much less, the preventing process recited in the rejected claims. While Applicant does not dispute that ELSTON discloses a system which can

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recycle waste water for a building, the Examiner has failed to identify any disclosure in this document with regard to, among other features recited in the above-noted claims, *removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building, and/or supplying the rainwater to a purifier to carry out pH adjustment and sterilization, and supplying the rainwater from the purifier to a storage tank.*

Thus, Applicant submits that the above-noted document fails to disclose or suggest the features recited in at least amended independent claims 1, 5, 9 and 13. Because no proper combination or modification of the above-noted documents discloses or suggests at least the above-noted features of the instant invention, Applicant submits that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 1, 5, 9 and 13.

Furthermore, Applicant submits that there is no motivation or rationale disclosed or suggested in the art to modify any of the applied documents in the manner asserted by the Examiner. Nor does the Examiner's opinion provide a proper basis for these features or for the motivation to modify this document, in the manner suggested by the Examiner. Therefore, Applicant submits that the invention as recited in at least independent claims 1, 5, 9 and 13 is not rendered obvious by any reasonable inspection of this disclosure.

Applicant directs the Examiner's attention to the guidelines identified in M.P.E.P section 2141 which state that "[i]n determining the propriety of the Patent Office case for

obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification."

In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

As this section clearly indicates, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)."

Moreover, it has been legally established that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) Although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.' 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references)."

Additionally, it has been held that a statement that modifications of the prior art to

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meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

Furthermore, Applicant submits that dependent claims 2-4, 6-8, 10-12 and 14-16 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper combination of the above-noted applied documents discloses or suggests, in combination: that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 2; that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide as recited in claim 3; that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 4; that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 6; that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species

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produced by decomposition of aqueous hydrogen peroxide as recited in claim 7; that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 8; that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 10; that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide as recited in claim 11; that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 12; that the method further comprises carrying out physical filtration at or before an inlet port of the purifier as recited in claim 14; that the pH adjustment neutralizes the rainwater that is acidic, and the sterilization is carried out using active oxygen species produced by decomposition of aqueous hydrogen peroxide as recited in claim 15; and that the method further comprises decomposing and eliminating residual active oxygen species remaining in the rainwater that has been supplied to the storage tank as recited in claim 16.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejections under 35 U.S.C. § 103(a) and indicate that these claims are allowable over the applied art of record.

CONCLUSION

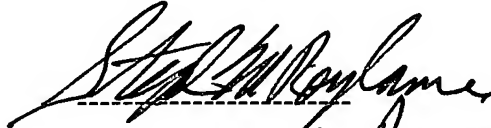
Applicant respectfully submits that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. § § 112, 102 and 103 and respectfully requests the Examiner to indicate allowance of each and every pending claim of the present invention.

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicant's invention, as recited in each of the pending claims. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

The Commissioner is hereby authorized to charge any fees necessary for consideration of this amendment to deposit account No. 19-0089.

Respectfully submitted,
M. HOSOYA


Bruce H. Bernstein
Reg. No. 29,027
Reg no 31,296

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191